

**U.S. Pat. Appl. Ser. No. 10/587,662**  
**Attorney Docket No. 10191/4355**  
**Reply to Final Office Action of February 2, 2009**

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-8. (Canceled).

9. (Previously Presented) The varactor diode alternative circuit as recited in claim 12, wherein the at least one of the resistor network and the inductor network is arranged so that anodes of the varactor diodes, with respect to the control voltage supplied to the circuit, are connected to a first electrical potential, and cathodes of the varactor diodes, with respect to the control voltage, are connected to a second electrical potential that is higher, by the control voltage, compared to the first electrical potential.

10-11. (Canceled).

12. (Currently Amended) A varactor diode alternative circuit, comprising:  
at least three varactor diodes that are in each case connected in series alternatingly opposite to one another; and

at least one of a resistor network and an inductor network, the at least one of the resistor network and the inductor network coupled to the at least three varactor diodes;

wherein:

the varactor diode alternative circuit is adapted to tune an oscillating frequency of an oscillator circuit whose oscillating frequency is tunable, the tuning being by adjusting a capacitance of the alternative circuit in response to a control voltage;

at each of the varactor diodes, ~~[[a]] the control voltage supplied to the circuit for adjusting capacitance~~ is applied at least approximately at full extent, and an alternating voltage that is applied at the series connection of the varactor diodes, which is at a higher frequency compared to the control voltage, is distributed at least approximately uniformly to the varactor diodes;

the at least three varactor diodes include one of an even number of varactor diodes and an even number of parallel connections of varactor diodes;

at each node of the series connection, respectively either anodes of the varactor diodes or cathodes of the varactor diodes are connected to one another;

nodes of the cathodes lying between outside terminals are connected via at least one of resistors and inductors to the cathodes of the varactor diodes whose cathodes form a first outside terminal and a second outside terminal of the alternative circuit; and

nodes of the anodes lying between the outside terminals are being connected to one of resistors and inductors whose second terminals form a control voltage terminal for supplying the control voltage to set the capacitance.

13. (Canceled).

14. (Currently Amended) An electrical circuit device or an electrical unit, comprising:  
an oscillator circuit having a tunable oscillating frequency; and  
a varactor diode alternative circuit configured to tune the oscillating frequency by adjusting a capacitance of the alternative circuit in response to a control voltage, the alternative circuit including:

at least three varactor diodes that are in each case connected in series alternately opposite to one another; and

at least one of a resistor network and an inductor network, the at least one of the resistor network and the inductor network coupled to the at least three varactor diodes;

wherein:

at each of the varactor diodes, the control voltage is applied at least approximately at full extent, and an alternating voltage that is applied at the series connection of the varactor diodes, which is at a higher frequency compared to the control voltage, is distributed at least approximately uniformly to the varactor diodes;

the at least three varactor diodes include one of an even number of varactor diodes and an even number of parallel connections of varactor diodes;

at each node of the series connection, respectively either anodes of the varactor diodes or cathodes of the varactor diodes are connected to one another;

nodes of the cathodes lying between outside terminals are connected via at least one of resistors and inductors to the cathodes of the varactor diodes whose cathodes form a first outside terminal and a second outside terminal of the alternative circuit; and

nodes of the anodes lying between the outside terminals are being connected to one of resistors and inductors whose second terminals form a control voltage terminal for supplying the control voltage to set the capacitance.

15. (Previously Presented) The electrical circuit device or electrical unit as recited in claim 14, wherein the at least one of the resistor network and the inductor network is arranged so that anodes of the varactor diodes, with respect to the control voltage supplied to the alternative circuit, are connected to a first electrical potential, and cathodes of the varactor diodes, with respect to the control voltage, are connected to a second electrical potential that is higher, by the control voltage, compared to the first electrical potential.